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EXAMINER	
BRIER, JEFFERY A	

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2628	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/617,599	DAUTELLE, JEAN-MARIE R.	
	Examiner	Art Unit	
	Jeffery A. Brier	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20 and 24-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20 and 24-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The response filed on 9/21/2006 did not have any amendments to this application.

Response to Arguments

2. Applicant's arguments filed 9/21/2006 with respect to the 103 rejection based upon the Jazz article and by applicants admission of the prior art have been fully considered, however, the Examiner maintains it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the Jazz article to modify Jazz to use a 2D scene graph in the prior art three dimensional graphics circuit module, see page 7 lines 1-19 of applicants specification, to render and display a two-dimensional object. The motivation to use the three dimensional graphics circuit module to render the scene graph is the monitor 38e will display any changes that need to be made to the displayed image much faster than using a CPU based renderer such as the Java2D renderer described at page 173 in the Jazz article and referenced by applicant at page 11 last two paragraphs of the 3/03/2006 response. The Jazz article on page 174 discusses the advantages and disadvantages of using Java2D to render the 2d scene graph one of the disadvantages is slower rendering of the image. Thus, Jazz is suggesting that a faster means for rendering the 2D scene graph is needed. Therefore, one of ordinary skill in the art of displaying critical information such as air traffic control information will need to make the monitor 38e display updates quickly and

one way of doing this will be to use the three dimensional graphics circuit module to render and display the two dimensional object defined by the scene graph onto the monitor 38e. Additionally page 173 of the Jazz article makes reference to OpenGL as another way to implement Jazz which OpenGL is an API that can use a three dimensional graphics circuit to render 3D scene graphs.

Applicant argues in the 9/21/2006 response in the paragraph spanning pages 3 and 4 that the references used by the Examiner do not contemplate use of the three-dimensional graphics circuit module to store scene graph data including a two-dimension object, to interpret a scene graph display command associate with the two-dimensional object, and to display the two-dimensional object as claimed. However, Jazz does suggest to one of ordinary skill in the art to modify the prior art three-dimensional graphics circuit module to store 2D scene graph data in a manner similar to its storage of 3D scene graph data, to interpret a 2D scene graph display command associate with the two-dimensional object in a manner similar to interpretation of 3D scene graph display command, and to display the two-dimensional object in a manner similar to the three-dimensional object, see applicants specification at page 7 lines 8-19, because Jazz discusses the desirability of processing two dimensional objects in a manner similar to the processing of three dimensional objects by using scene graphs. Additionally Jazz makes reference to OpenGL on page 173 second column paragraphs 1 and 5 which is an API to the prior art three-dimensional graphics circuit module, see applicants specification at page 1 lines 1-6.

Applicant argues in the full paragraph on page 4 that Jazz uses Java2D which renders the 2D objects more slowly by the CPU than by applicants modification of prior art three-dimensional graphics circuit module and alleges that conventional rendering provided by conventional air traffic control system, or alternatively, by the Jazz article, has adequate speed when rendering 2D objects. However, this argument is not convincing in view of applicants specification at page 14 lines 26-28 which discusses how applicants system renders on the monitor much more quickly than the prior art "paint" commands and in view of the Jazz article at page 174 which discusses that using scene graphs require more processing, thus, suggesting that a faster means of processing is necessary.

Applicant argues in the paragraph spanning pages 4 and 5 the commands used in Jazz Java 2D cannot be stored in the prior art three-dimensional graphics circuit module, however, the Jazz article suggests modifying Jazz and the prior art three-dimensional graphics circuit module in order to provide faster rendering of the 2D objects as discussed in the 2 preceding paragraphs and as suggested by the reference in Jazz to OpenGL for the reasons given in the 2 preceding paragraphs.

Applicant discusses the admitted prior art in the remaining paragraphs on page 5 which discussion correctly emphasizes the admitted prior art three-dimensional graphics circuit card stores three-dimensional scene graph data and render three-dimensional images associated with the three-dimensional scene graph data and not two-dimensional images associated with a two-dimensional scene graph data.

Applicant argues in the last paragraph on page 5 and the first two paragraphs on page 6 that motivation to modify three-dimensional graphics circuit module is lacking. In the first paragraph on page 6 applicant argues that rendering of two dimensional object by conventional means has been sufficiently fast for most application including air traffic control systems, however, applicants specification at page 14 lines 26-28 state there is a need to render on the monitor much more quickly than the prior art "paint" commands and the Jazz article at page 174 discusses that using scene graphs require more processing, thus, both applicant and Jazz suggest that a faster means of processing the 2D scene graph is necessary. Also note applicants arguments at page 8 first and second full paragraphs where applicant argues that applicants faster rendering solves a long felt but unresolved need for example in air traffic control. Applicant further argues in the second paragraph on page 6 the claimed invention and the JAZZ article attempt to solve different problems, however, both applicant and Jazz are directed to using scene graphs for 2D objects and are concerned with processing speed, note the discussion of tradeoffs in Jazz at page 174.

Applicant argues hindsight in the third paragraph on page 6, in the paragraph spanning pages 6 and 7, and in the first full paragraph on page 7 in modifying the prior art three-dimensional graphics circuit module or card. However, hindsight is not present because Jazz makes reference to OpenGL on page 173 second column paragraphs 1 and 5 which is an API to the prior art three-dimensional graphics circuit module, see applicants specification at page 1 lines 1-6 and because at page 174 Jazz discusses that using scene graphs require more processing. Thus, Jazz teaches to one of

ordinary skill in the art to look to means of faster processing such as non-CPU based processing as is performed by OpenGL systems when using the prior art three-dimensional graphics circuit module or card.

Applicants argue in the second full paragraph on page 7 applicants argues that applicants admitted prior art teaches away from the modification. However, as discussed above the Jazz article suggests modifying the Jazz program and the prior art three-dimensional graphics circuit module or card as a means to render an image based upon the 2D scene graph more quickly and because Jazz makes reference to OpenGL which utilizes prior art three-dimensional graphics circuit modules or cards.

Applicant argues in the paragraph spanning pages 7 and 8 that fast rendering is present in Jazz and that faster rendering 2D objects by a 2D scene graph on a three-dimensional circuit card would be unexpected to one of ordinary skill in the art. As noted above Jazz on page 174 notes that using Java 2D to render a 2D scene graph requires system resources that slows rendering of the image and as noted above Jazz on page 173 discusses alternatively using OpenGL which uses local processors in a three-dimensional circuit card to speed up rendering of an image. Thus, Jazz teaches faster rendering means, such as a local processor in a graphics card, is needed when an image needs to be updated quickly.

Applicant argues on page 8 first and second full paragraphs that applicants faster rendering solves a long felt but unresolved need for example in air traffic control to render more quickly as air traffic density increases even though in the past air traffic control systems did not use 2D scene graphs and three-dimensional

graphics circuit modules but still provided good air traffic control throughout the world. First it should be noted that claims 1, 2, 6-9, 13-16, 19, 20, and 24-28 do not claim air control traffic system and the remaining claims 3-5, 10-12, and 17-18 do not fully claim air traffic control system. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Thus, applicant is arguing features which are not claimed. Secondly an air traffic control system designer would look at all prior art image rendering systems in order to design a system that will adequately render the air traffic images and other information images for display on a monitor so the air traffic control personnel may be apprised quickly of changing air traffic.

Applicants arguments concerning claim 3 in the paragraph spanning pages 8 and 9 alleges applicants have solved in the field of air traffic control systems a problem not previously recognized by others, however, as noted by applicant at page 3 lines 1-5 work had been performed by others in air traffic control systems to provide rapid real time systems. The Jazz article at page 174 discusses the advantages and disadvantages of using a 2D scene graph, however, the advantages of using the 2D scene graph noted by Jazz on page 174 outweighs the need for increased processing means to overcome the disadvantages. Thus, an air traffic control system designer would look at all prior art rendering systems in order to design a system that will adequately render the air traffic images and other information images for display on a monitor so the air traffic control personnel may be apprised quickly of changing air traffic.

Applicants arguments concerning claim 4 in the following paragraph on page 9 is not persuasive for the reasons given for claim 3 since claim 3 covers the claim limitation found in this claim.

Applicants arguments concerning claim 5 in the following paragraph on page 9 is not persuasive for the reasons given for claim 3 since claim 3 covers the claim limitations found in this claim.

Applicants arguments concerning claim 25 in the following paragraph on page 9 is not persuasive because the modification of Jazz when to be used in applicants admitted prior art 3D graphics circuit boards described at page 7 lines 1-19 of applicants specification generates the entire graphical display via the local processor.

For the reasons given above the rejection of claims 1-7, 24, and 25 is maintained.

The remaining arguments concerning claims 8-14, 26, and 27 and concerning claims 15-20, 28, and 29 refer to the arguments presented for claims 1-7, 24, and 25. For the reasons given above for claims 1-7, 24, and 25 the rejection of these claims are maintained.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The previous rejection has not been modified and is reproduced below.

5. Claims 1-20 and 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over by the article titled Jazz: An Extensible Zoomable User Interface Graphics Toolkit in Java by Benjamin B. Bederson, Jon Meyer, Lance Good and by applicants admission of the prior art.

This article may be found at:

http://citeseer.ist.psu.edu/bederson00jazz.html

http://portal.acm.org/citation.cfm?id=354754&coll=ACM&dl=ACM&CFID=46921808&CFTOKEN=68192717

http://www.cs.umd.edu/hcil/jazz/learn/papers/HCIL-2000-13.pdf

http://www.cs.umd.edu/hcil/jazz/learn/publications.shtml

Applicant alleges on page 8 lines 8-12: [0040] Also, existing scene graph APIs provide three-dimensional (3D) graphical objects and corresponding 3D images on a graphical display in particular software environments, for example, in computer games. However, scene graphs have not been applied to other software environments, for example, two-dimensional (2D) desktop applications having combinations of 2D windows, 2D text, and 2D graphics. However, the prior art supplied by the examiner proves this allegation concerning 2D windows, 2D text, and 2D graphics to be incorrect.

Applicants admitted prior art discussed at page 7 lines 1-19 of applicants specification discusses:

Various high-level software application programmer interfaces (APIs) have been established to create a scene graph when presented with the scene graph display commands. For example Java3D and VRML provide high-level software to generate a scene graph. Lower level APIs have also been provided, including Open GL, and Direct

3D. Application software, for example computer games, has been developed to provide the scene graph display command to the API.

Scene graph techniques are conventionally used to provide a scene graph associated with three-dimensional images on a graphical display, for example in computer games. To this end, software manufacturers have provided the three-dimensional (3D) applications and APIs described above. Also, hardware manufacturers have provided 3D graphics circuit boards, having local processing capability on the graphical circuit board, and having the ability to interpret scene graph data and rapidly provide a corresponding graphical display on a monitor.

The scene graph programming techniques, in conjunction with the 3D graphic circuit board, provide the ability to rapidly render a 3D image on a graphical display with minimal impact on a central computer processor. Images on the graphical display can also be rapidly updated with one or more display commands, provided by the application software, interpreted by the API, and sent to the 3D graphics circuit board.

The motivation to use a three dimensional graphics circuit module to render the scene graph is the monitor 38e will display any changes that need to be made to the displayed image much faster than using a CPU based renderer such as the Java2D renderer described at page 173 in the Jazz article. The Jazz article on page 174 discusses the advantages and disadvantages of using Java2D to render the 2d scene graph one of which is slower rendering of the image. Thus, Jazz is suggesting that a faster means for rendering the 2D scene graph is needed. It should be noted that quick updating of the displayed image will allow air traffic control personal to be more quickly informed of aircraft status. This is needed to allow the air traffic personal to quickly detect dangerous aircraft situations. Thus, a need for a graphical display system that is faster is recognized. Therefore, one of ordinary skill in the art of displaying information such as air traffic control information will need to make the monitor 38e display updates quickly and one way of doing this will be to use the three dimensional graphics circuit

module to render and display the two dimensional object defined by the scene graph onto the monitor 38e.

A detailed analysis of the claim follows:

Claim 1:

The Jazz article teaches a computer implemented method (*The JAZZ program is implemented on a computer.*) of providing a graphical display for a desktop application (*Page 177 in the section under the title Creating Application Specific Widgets describes various desktop applications of Jazz.*), comprising:

generating scene graph data in conjunction with a central processing unit (*Page 173 discusses the JAZZ toolkit which develops ZUI application by using scene graphs. The JAZZ toolkit would process the scene graphs in the CPU.*), the scene graph data including at least one two-dimensional object (*Page 171 in the abstract, page 173 in the second column first paragraph, and page 174 discuss two dimensional objects and 2D scene graphs representing the 2D objects.*);

Jazz does not completely teach storing the scene graph data in a three-dimensional graphics circuits module coupled to the central processing unit (*Jazz: Inherently the scene graph needs to be stored in order for the computer to use the scene graph to generate the 2D object's image but it appears to use one processor such as the CPU. Applicants admission of the prior art: Inherently the scene graph needs to be stored in order for the graphics circuits module to use the scene graph to generate the object's image and the CPU is coupled to the graphics circuits module.*),

wherein the three-dimensional graphics circuit module has a local processor, and wherein the three-dimensional graphics circuit module is adapted to generate the graphical display via the local processor; (*Applicants admission of the prior art: It has a local processor and it generate the graphical display by its local processor.*);

Jazz teaches generating a scene graph display command (*Inherently a command is present that causes the computer in Jazz to read the stored scene graph in order to process the scene graph into an image of the 2D object and causes the computer in applicants admitted prior art three-dimensional graphics circuit module to read the stored scene graph in order to process the scene graph into an image of the 3D object.*), wherein the scene graph display command is associated with the at least one two-dimensional object;

Jazz does not completely teach interpreting the scene graph display command with the three-dimensional graphics circuit module (Jazz: A *CPU running a program is a circuit, thus, Jazz forms the CPU into a graphics circuit module which interprets the scene graph display command to interpret the scene graph into a graphical image that may be displayed on the monitor. Applicants admission of the prior art describes a graphics circuit module which interprets the scene graph display command to interpret the scene graph into a graphical image that may be displayed on the monitor.*); and

displaying at least one two-dimensional image on the graphical display with the three dimensional graphics circuit module, wherein the at least one two-dimensional image is associated with the at least one two-dimensional object (Jazz: *The scene graph corresponding to a two dimensional object is used by the computer to generate*

an image corresponding to the two dimensional object. Applicants admission of the prior art describes the scene graph corresponding to a three dimensional object is used by the computer to generate an image corresponding to the three dimensional object.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jazz to operate with a three dimensional graphics circuit module in view of applicants admitted prior art three dimensional graphics circuit module described at page 7 lines 1-19 of applicants specification. The motivation to use a graphics circuit module to render the scene graph is the monitor 38e will display any changes that need to be made to the displayed image much faster than using a CPU based renderer such as the Java2D renderer described at page 173 in the Jazz article. The Jazz article on page 174 discusses the advantages and disadvantages of using Java2D to render the 2d scene graph one of which is slower rendering of the image. Thus, Jazz is suggesting that a faster means for rendering the 2D scene graph is needed. It should be noted that quick updating of the displayed image will allow air traffic control personal to be more quickly informed of aircraft status. This is needed to allow the air traffic personal to quickly detect dangerous aircraft situations. Thus, a need for a graphical display system that is faster is recognized. Therefore, one of ordinary skill in the art of displaying information such as air traffic control information will need to make the monitor 38e display updates quickly and one way of doing this will be to use the three dimensional graphics circuit module to render and display the two dimensional object defined by the scene graph onto the monitor 38e.

Claim 2:

The Jazz article teaches the method of claim 1, wherein the generating the scene graph display command includes:

receiving object data (*name of the object is object data.*) associated with a selected one of the at least one two-dimensional object; and

associating the object data (*Associating the name of the object with the scene graph that generates the image.*) with the selected one of the at least one two-dimensional object to provide the scene graph display command (*The command that causes the computer to execute the scene graph would refer to the name of the scene graph. Refer to pages 174-176 under the heading Architecture.*).

Claim 6:

The Jazz article teaches the method of claim 1, wherein the generating the scene graph data includes generating the scene graph data associated with at least one two-dimensional object and with at least one three-dimensional object (*In the section under the heading The JAZZ Toolkit found on pages 173-174 the article discusses 3D and 2D images generated by JAZZ.*).

Claim 7:

The Jazz article teaches the method of claim 1, wherein the scene graph data includes at least one text object (*On page 173 second column first paragraph the Jazz article teaches fonts which are text and characters and on page 171 in the introduction text areas are discussed and figure 1 shows an image of text objects displayed to the user in the HiNote snapshot.*), the at least one two-dimensional object includes at least

one text character, and the at least one two-dimensional image includes at least one text character image.

Claims 8 and 15:

These claims correspond to method claim 1 and are rejected for the reasons given for claim 1. Since Jazz is a JAVA program it inherently has computer program medium having computer readable code and it inherently teaches using a computer to execute the program.

Claims 9 and 16:

These claims correspond to method claim 2 and are rejected for the reasons given for claim 2.

Claims 13 and 19:

These claims correspond to method claim 6 and are rejected for the reasons given for claim 6.

Claims 14 and 20:

These claims correspond to method claim 7 and are rejected for the reasons given for claim 7.

Claims 3, 10, and 17:

Each of these dependent claims claim wherein the object data is provided by a radar system and is associated with at least one of an aircraft and a geographic feature.

Jazz does not mention these specific object images, however, Jazz teaches using scene graphs to define and later generate any two dimensional image which to one of ordinary skill in the computer graphics art would include the claimed aircraft and geographic feature. Applicant in the Background of the Invention discusses prior art systems that display images of aircraft and geographic features. It would have been obvious to one of ordinary skill in the art at the time of applicants invention to define aircraft and geographic images with 2D scene graphs because these images require no different graphics generation than the images specifically discussed by Jazz.

Claims 4, 11, and 18:

Each of these dependent claims claim wherein the at least one two-dimensional object represents an aircraft.

Jazz does not mention this specific object image, however, Jazz teaches using scene graphs to define and later generate any two dimensional image which to one of ordinary skill in the computer graphics art would include the claimed aircraft feature. Applicant in the Background of the Invention discusses prior art systems that display images of aircraft. It would have been obvious to one of ordinary skill in the art at the time of applicants invention to define aircraft images with 2D scene graphs because

these images require no different graphics generation than the images specifically discussed by Jazz.

Claims 5 and 12:

Each of these dependent claims claim wherein the generating the scene graph data includes generating the scene graph data including at least one of a first two-dimensional scene graph data portion representing a land geography, and a second two-dimensional scene graph data portion representing one or more aircraft.

Jazz does not mention these specific object images, however, Jazz teaches using scene graphs to define and later generate any two dimensional image which to one of ordinary skill in the computer graphics art would include the claimed aircraft and geographic feature. Applicant in the Background of the Invention discusses prior art systems that display images of aircraft and geographic features. It would have been obvious to one of ordinary skill in the art at the time of applicants invention to define aircraft and geographic images with 2D scene graphs because these images require no different graphics generation than the images specifically discussed by Jazz.

Claims 24, 26, and 28:

24. (New) The method of Claim 1, wherein the three-dimensional graphics circuit module is a three-dimensional graphics circuit card.

26. (New) The method of Claim 8, wherein the three-dimensional graphics circuit module is a three-dimensional graphics circuit card.

28. (New) The method of Claim 15, wherein the three-dimensional graphics circuit module is a three-dimensional graphics circuit card.

These claims are taught by applicants admission of the prior art because the three dimensional graphics circuit module is described as 3D graphics circuit boards which is know to one of ordinary skill in the art as a three-dimensional graphics circuit card. In the above obvious statement for claim 1 replace "three dimensional graphics circuit module" with "three-dimensional graphics circuit card" and replace "applicants admitted prior art three dimensional graphics circuit module" with "applicants admitted prior art 3D graphics circuit boards" and apply the same rationale to form:

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Jazz to operate with a three-dimensional graphics circuit card in view of applicants admitted prior art 3D graphics circuit boards described at page 7 lines 1-19 of applicants specification.

Claims 25, 27, and 29:

25. (New) The method of Claim 1, wherein the three-dimensional graphics circuit module is adapted to generate the entire graphical display via the local processor.

27. (New) The method of Claim 8, wherein the three-dimensional graphics circuit module is adapted to generate the entire vaphical display via the local processor.

29. (New) The method of Claim 15, wherein the three-dimensional graphics circuit module is adapted to generate the entire graphical display via the local processor.

These claims are taught by the modification of Jazz because applicants admitted prior art 3D graphics circuit boards described at page 7 lines 1-19 of applicants specification generate the entire graphical display via the local processor.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery A Brier whose telephone number is (571) 272-7656. The examiner can normally be reached on M-F from 7:00 to 3:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached at (571) 272-7664. The fax phone Number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeffery A Brier
Primary Examiner
Division 2628